

1 What is claimed is:

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3 1. A dishwasher comprising:

4 a washing chamber;

5 top and bottom nozzles injecting water in the washing chamber;

6 a sump provided under the washing chamber to store the water;

7 a pump pumping the water stored in the sump;

8 a supply pipe adjacent to one side of the pump wherein the water pumped by the

9 pump flows in the supply pipe;

10 upper and lower pipes connected to the supply pipe to lead the water to the top and

11 bottom nozzles, respectively;

12 a valve rotatably installed at a connecting portion between the supply pipe and the

13 upper and lower pipes to selectively open/close the supply pipe and the upper and lower

14 pipes; and

15 a driving means for turning the valve by checking a position of the valve.

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17 2. The dishwasher as claimed in claim 1, wherein the valve has a semi-

18 cylindrical shape so that upper and lower ends are hinge-coupled between the supply pipe and

19 the upper and lower pipes.

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21 3. The dishwasher as claimed in claim 1, the driving means comprising:

22 a motor rotating a rotational shaft connected to the valve;

23 a cam connected to the rotational shaft to rotate together with the valve, the cam

24 having a plurality of sections differing in radius from each other; and

25 a sensing unit brought contact with an outer circumference of the cam to control an
26 operation of the motor.

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28 4. The dishwasher as claimed in claim 3, wherein the motor is a step motor
29 enabling to adjust a rotational angle.

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31 5. The dishwasher as claimed in claim 3, wherein the cam comprises a first cam
32 having a first radius and a second cam having a second radius smaller than the first radius.

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34 6. The dishwasher as claimed in claim 3, the sensing unit comprising:
35 a button brought contact with the outer circumference of the cam to be compressed or
36 restored; and
37 a micro switch turned on or off according to a compression or restoration of the
38 button to control the motor.

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40 7. The dishwasher as claimed in claim 6, wherein the cam comprises a first cam
41 having a first radius to compress the button and a second cam having a second radius smaller
42 than the first radius to restore the compressed button.

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44 8. The dishwasher as claimed in claim 6, wherein the micro switch cuts off a
45 power applied to the motor for a predetermined time on being switched 'on/off'.

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47 9. The dishwasher as claimed in claim 6, the sensing unit further comprising a
48 lever provided between the cam and the button to compress or restore the button by being

brought contact with the outer circumference of the cam.

10. The dishwasher as claimed in claim 9, wherein the cam comprises a first cam having a first radius to compress the button and a second cam having a second radius smaller than the first radius to restore the compressed button.

11. The dishwasher as claimed in claim 9, wherein the micro switch cuts off a power applied to the motor for a predetermined time on being switched 'on/off'.